

When the Stars Came Home

Additional Resources

Create an Observation Journal

Level Grades 2 – 8

Student Groupings individuals

Length 5 minutes/day, over a few weeks

Brief description: Students are invited to observe the sky as often as possible over a few weeks and record their observations in a journal.

Materials:

- Printed copies of the journal worksheet
- One small binder or duo-tang per student

Preamble: Astronomers can't touch or run experiments to study the objects in the sky. They have to use observations to learn about the Universe and they must record their observations to notice changes and patterns. Nowadays, very sensitive cameras have replaced drawing and note-keeping in astrophysical research, but many amateur astronomers still keep records of their observations in log books. In this activity, students are invited to become astronomers by creating their own observation journal!

Preparation: Print the journal page in many copies and invite students to put a few in a small binder. They should be able to add more pages if they need to.

Procedure: Over the course of a few weeks or months, invite your students to look up in the evening, but also during the day, and note what they observe. They might notice interesting phenomena and objects, such as phases of the Moon, very bright stars and possible planets. If

they're lucky, they might even spot a shooting star or catch an aurora! Note: this activity will be weather/location dependent but students can note these facts in their journal as well and discuss them.

Discussion prompts

- The students might be surprised to notice how the Moon changes from day to day, and how it's not always in the same place. Discuss the phases of the Moon and ask them if they know the name of the phase they observed.



- Did they notice some bright stars? You could use Stellarium (see Activity 2) to identify the stars they noticed. Some of them might turn out to be planets! Planets also appear as points of light as they reflect the light from the Sun. Their light doesn't twinkle as much as the light from the stars, but they are not always easy to identify. Stellarium will help!
- Did you notice colours in the sky? Most objects in the sky appear white, but some stars can have a colour that is noticeable. Some are really blue while others are red! The colours are shown in Stellarium (colour of the dot of the star). Planets also have slight colours: Mars appears reddish while Saturn and Jupiter are more yellow. Other phenomena can also have colours such as shooting stars and the aurora.
- Were they able to identify a constellation or pattern in the sky? Starting with the Big Dipper is a good idea since it's visible every night of the year in Canada and it's made up of seven relatively bright stars.

Note: If it's difficult for the students to observe the sky independently, or if you want to do this activity during a stretch of bad weather, don't hesitate to use Stellarium (see Activity 2) and have them fill their journal this way. The real sky is more beautiful, but Stellarium is a very useful tool when the real sky isn't accessible!